

THE PART-TIME WAGE GAP: A CAREER PERSPECTIVE**

BY

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Summary

Because promotions are an important source of wage growth, we argue that the low incidence of promotions among part-time workers will contribute to the emergence of the part-time wage gap. We test this claim using Dutch employer–employee matched data. We find that the part-time wage gap is absent among young school leavers, but that it is well established among more mature workers. Moreover, we find that promotions account for a wage growth of about eight log points. Finally, workers in part-time jobs experience a lower rate of promotion relative to workers in full-time jobs.

Key words: part-time employment, promotions, wages, wage gap

JEL Code(s): J31, J24, J22

1 INTRODUCTION

Women in the labor market reportedly fare badly because they must combine labor market activities with family and fertility decisions; a trade-off which their male counterparts seldom face (Goldin 1997, OECD 2001).¹ In fact, women's participation in labor market activities is intimately connected to women's role within the household (Blau 1998, OECD 2002, Blau and Kahn 2003).

However, the introduction of flexible work arrangements, such as part-time employment, has facilitated the reconciliation of women's multiple roles

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1 The extent of the gender wage gap has diminished over time as women have accumulated more human capital and women's presence on the labor market has become more and more customary (Blau and Kahn 1997). The gender wage gap tends to be reduced by the inclusion of the number of working hours among the covariates, however (Boden and Galizzi 2003, Joy 2003). Controlling for personal and job characteristics, the Dutch gender wage gap is about 7% (Portegijs et al. 2002).

in the household and in the labor market, leading to increased women labor market participation. Consequently, part-time employment has quickly achieved extreme popularity among Dutch women of all age groups (Euwals and Hogerbrugge 2004). Women are usually happy with their part-time jobs (Fagan and Burchell 2002) because they regard them as the result of personal choices rather than as a failure to get a full-time job (men less so). In fact, part-time workers may engage in the home production of expensive (or high quality) services that would otherwise be purchased on the market (Freeman and Schettkat 2005). Consequently, part-time workers may be ready to accept a compensating differential in the form of a low wage.

Indeed, part-time workers tend to receive lower average wages ("wage" has to be understood as the hourly wage throughout the paper) than their full-time colleagues. Most of the gap disappears, however, once it is controlled for job and workers' characteristics. The little difference that remains unexplained is referred to as the part-time wage gap (the difference between the wage earned by otherwise equal part-time and full-time workers).

Small part-time wage gaps appear to characterize most European countries represented in the European Community Household Panel and is related to pattern of occupational segregation (Manning and Petrongolo 2005). In the US, using CPS sample and controlling for unobserved individual characteristics by means of lagged working hours, it is found that most of the raw part-time wage gap is explained by observable worker and job characteristics, that wage changes upon changes in working hours are small except when the change in hours is accompanied by a change in industry or occupation (Hirsch 2005). Moreover, in both the US and the UK (using the National Longitudinal Study of Youth and the New Earning Survey Panel Data, respectively) returns to work experience in part-time jobs are lower than returns to experience in full-time jobs (Gregory and Connolly 2001, Green and Ferber 2005a) and the part-time wage gap is almost naught among young workers (the UK result is obtained using the British Household Panel Survey). Furthermore, the part-time pay gap is found to widen with age (Manning and Robinson 2004, Hirsch 2005), and the negative effect of spells of part-time works last over time (Gregory and Connolly 2001, Green and Ferber 2005b). The scarring effect of part-time work spells has also been found – using the OSA supply panel – to affect Dutch women (Roman et al. 2004).

Although the longitudinal evidence suggests that it is unmeasured workers skills that are the principal determinant of the part-time wage gap, the precise mechanism through which the gap arises for workers who have stayed with the same employer has not been identified, yet.

We examine similar evidence for the Netherlands, confirming the patterns found for other countries. We extend the literature on the part-time wage gap by documenting the paucity of promotion opportunities faced by part-time

workers. The focus on the nexus between part-time work and promotions represents the original contribution of this paper to the literature on the part-time wage gap. Since wage increases upon promotion are substantial, over the whole career, part-time workers would experience a lower wage growth than their full-time colleagues. Consequently, a part-time wage gap emerges over time.

Hence, there may be a downside to part-time work because of its adverse effects on workers' careers that results from the interaction between part-time work (working hours) and firms' incentive mechanisms. In fact, firms may use promotions to stimulate human capital accumulation and skill acquisition (Gibbons and Waldman 1999). Since human capital accumulation is slow in part-time jobs, the incidence of promotion will be low among part-time workers. In addition, firms may use the number of hours worked as a screening device (Landers et al. 1996) or to measure effort (like in a tournament). In both cases the incidence of promotions would be low among part-time workers. Thus, firms' promotion behavior introduces a nexus between actual labor market experience and the part-time wage gap. More precisely, the part-time wage gap would not arise as young workers opt to work on a part-time schedule upon entering the labor market, but it would rather develop over time as the effects of foregone promotions during spells of part-time employment accumulate. Moreover, the gap would not disappear when workers would revert to full-time jobs.

The nexus between part-time work and career is of importance because to the extent that lower wages and diminished career opportunities are long-term consequences of part-time employment spells, these features would make part-time jobs less desirable. This, in turn, generates negative externalities affecting aggregate employment because in the Netherlands part-time work has been found to have a multiplicative effect on aggregate employment at the macro level (Van Lomwel and van Ours 2005). In addition, since the decision to work part-time work is intimately related to fertility, factors diminishing the appeal of part-time work may generate negative externalities on fertility rates, and eventually on human capital accumulation (Bovenberg 2005).

The structure of the paper is as follows. Section 2 presents the theoretical underpinnings for the persistence of an equilibrium part-time wage gap. Section 3 introduces the data set used in the empirical analysis. Section 4 discusses the results of the empirical analysis, and Section 5 offers concluding remarks.

2 THE PART-TIME WAGE GAP

2.1 *Compensating Differentials*

Equilibrium in the labor market may be characterized by a part-time wage gap only if: (i) firms cannot change their mix of part-time and full-time jobs to comply with workers' preferences; (ii) worker heterogeneity, i.e., part-time and full-time workers may not be exchangeable because part-time workers may have strong preferences about when to work that may not coincide with employers' preferences about work schedule, or because the two types of workers differ in their human capital; (iii) fixed labor costs.²

There are also factors with the opposite effect, i.e., factors that, in equilibrium, would generate a part-time wage premium. For example, in the presence of a variable product demand characterized by predictable peaks, firms may be willing to pay in order to have the flexibility to absorb them (Hirsch 2005).

The supply side literature has focused on the role of human capital accumulation. If there are fixed costs to learning, part-time workers would invest less in human capital (and skill acquisition) than otherwise equal full-time workers because fixed costs could be amortized over fewer working hours. However, the slow human capital accumulation may also be the consequence of the choice to work part-time if employers consistently allot less challenging tasks (with little learning opportunities) to part-time workers (Fuchs Epstein et al. 1999).

The empirical evidence – that shows very low returns to tenure and labor market experience accumulated during part-time employment spells – seems to be supportive of the human capital approach to the part-time wage gap (Swaffield 2000, Walby and Olsen 2000, Connolly and Gregory 2004, Manning and Robinson 2004, 2005, Hirsch 2005). In fact, the US part-time wage gap becomes not significant once human capital and occupational skill requirements are accounted for (Hirsch 2005).

2.2 *The Career Perspective*

The part-time wage gap may also evolve during workers' career progression, in fact, wage changes around promotions are substantial (Baker et al. 1994, Booth et al. 2003, Belzil and Bognanno 2005).³

2 In the presence of fixed labor costs (such as hiring and training costs) firms may be able to equalize labor costs across part-time and full-time jobs. However, because part-time workers are more expensive than full-time workers, the former must accept lower wages than their full-time colleagues (Biddle and Zarkin 1989).

3 A career is a broad concept, broader than that of a promotion because it includes horizontal as well as vertical movements (up the hierarchical ladder, promotions). To the extent

This view of the part-time wage gap entails that it would not arise contextually with workers' choice to work part-time, but that it would rather develop in step with workers' career (or lack thereof) and in relation to firms' provision of incentives. For example, firms use promotions to stimulate job-related investments (Gibbons and Waldman 1999). If human capital accumulation is faster in full-time jobs (relative to part-time ones) the incidence of promotion will be higher among full-time workers than among part-time workers. Over time, as the effects of foregone promotions cumulate, the part-time wage gap would ensue.

Alternatively, promotions may also be used to stimulate investments in effort, commitment, and flexibility. If working hours are taken to be a measure of effort (or commitment) the use of relative performance evaluations to assign promotions (Lazear and Rosen 1981, Lazear 1995) would also result in an equilibrium part-time wage gap when the measurement of workers' performance was not adjusted for the hours worked or when working hours were to affect performance in a non-linear fashion. In such circumstances part-time workers would be systematically outperformed by full-time workers when competing for promotion.

In addition, when firms use the number of hours worked as a screening device, as in the rat race model (Landers et al. 1996), firms require long working hours to allocate promotions in order to discourage workers with low commitment from applying. Part-time workers will be regarded as less committed and less flexible workers because of their rival interests (typically the family). Consequently, part-time workers would experience a low incidence of promotions.

There is indirect evidence, based on US and UK data, of a positive relationship between the number of hours worked (overtime) and the incidence of promotions among full-time workers (Bishop 1990, McCue 1996, Booth et al. 2003). UK data shows that, when part-time jobs are included, male workers turn out to have a higher probability of being promoted than their female colleagues (Booth et al. 2003). In other words, women's choices for part-time jobs may indeed lower their promotion probability and have long-lasting consequences.

Similarly, the number of hours worked has a positive effect on the (perceived) probability of promotion for a sample of German and US workers (Bell and Richard 2000). This seems to be the case in the Dutch labor market too, past part-time employment spells have long-term negative effects on Dutch workers' wages, and these effects are larger for men than for women

Footnote 3 continued

that experiencing a transition, be it vertical or horizontal, is conducive to wage increases our argument will carry through. Therefore, we will use the two terms, career and promotion, interchangeably through the paper.

(Roman et al. 2004). Notice that part-time employment is almost the rule among Dutch women while it is much less frequent among Dutch men. In other words, where long working hours for men is the norm (but less so for women), the gap for working part-time can be very high, and the wage gap would be larger for men (the group affected by the norm) than for women (Bell and Freeman 2000).⁴

It follows that when workers enter part-time employment (and Dutch women are likely to do so) they also incur a long-run career handicap because this choice reduces the likelihood of promotion (Kunze 2000). The ensuing wage gap with respect to other workers (typically male colleagues) who did not opt for part-time employment will be permanent and it will not be reversed by a subsequent decision to work full time again.⁵

3 DATA AND DESCRIPTIVE ANALYSIS

The data set consists of employer–employee matched data resulting from a two-stage sampling process. In the first stage organizations (firms) are randomly sampled, in the second stage employees are sampled from firms' payroll and their characteristics are recorded. The fraction of workers sampled is inversely proportional to firm size (i.e., the entire workforce is observed in small firms). Workers' characteristics are compiled from administrative records by personnel of the Dutch ministry of Social Affairs and Employment (Venema and Faas 1999). The data cover all economic sectors. Therefore, firms operating in the public sectors are included in the present analysis (1.42% of the firms surveyed, accounting for 7% of the workers).

We use (pool) the waves 1999 and 2001 of the working conditions survey (AVO, the waves are named after the year when the data become available), based on two independent samples of firms. In the first wave (covering the years 1997–1998, the 1999 wave) 1,625 firms are surveyed, and in the second wave (covering the years 1999–2000, the 2001 wave) 1,558 firms are surveyed.

Each wave is a panel in that information on employees is collected twice: in October 1997 and October 1998 for the first wave (and October 1999 and October 2000 for the second wave). The two waves together do not form a four-year panel; consequently, employees can be observed only for a maxi-

4 The relationship between part-time employment and promotion probability has also consequences for the evolution of the gender wage gap. If female employees have a higher probability of working part-time compared to their male colleagues, the long-run effects of past part-time employment would be compound in the gender wage gap. Therefore, to accurately estimate the gender wage gap from a cross-section of full-time workers, researchers ought to be able to control for past part-time employment (Green and Ferber 2005a).

5 To be sure, when mobility between labor market states is high focusing exclusively on full-time workers may be misleading because full-time workers might have held a part-time job somewhere in the past.

imum of 2 years. However, within each wave the panel structure applies only to the employees who stayed with the same employer the year out (information about these employees is collected twice); employees leaving the firm and newly-hired employees are observed only once. Employees who leave the employer during the year are observed only at the beginning of each wave (October 1997 or October 1999); employees who are hired during the year are observed only at the end of each wave (October 1998 or October 2000). While the previous labor market position of newly-hired workers is recorded their previous wage and job type is not. Similarly, the data record the initial wage of the workers who left the firm but no information is available about their job (and wage) of destination.

The data does not contain any information concerning employees' household situation or other demographic characteristics apart from age and educational attainment that could be useful to model the participation decision. Therefore, the data limitations are such that our results should be interpreted as being conditional on the participation decision. However, the bias introduced is not likely to be large. In fact, 90% of the workers in our sample did not undergo a change in their working hours but experienced (sometimes consistent) wage changes.

Another particularity of our data relates to the job description, instead of the standard occupation classification, the data set covers the two dimensions of the job description that are relevant for pay and promotion decisions: Job level (nine levels), which includes the autonomy of the decision making and the complexity of the task, and an occupational classification (seven types), which is similar to the standard one digit occupational classification. Additional information regarding the occupational classification can be found in the working paper version of this article (Russo and Hassink 2005).

Along with the workers, and job characteristics, the number of hours worked during the week (it is a typical week, without holidays) and the average contractual length of the working week at the establishment are also reported.

The data also record if an individual has experienced internal mobility (5% of the workers experienced horizontal or vertical mobility) or has been promoted over the year (4% of the workers). According to the definition applied, workers experience internal mobility when their position within the firm has changed because the level of their job has changed (increased), there has been a major change in their duties, or their tasks are now carried out in another department within the same firm.

The data set has two related features that warrant its use: first, the information about the wage is extremely precise. Second, the information about the wage is extremely well detailed. The wage consist of two parts, the base wage, which is linked to job title and occupation (it is the wage definition used in standard wage scales), and a variable (individual) wage component,

which includes overtime payments, compensating differentials (for unpleasant working conditions), performance-related pay, and any other form of individual (incentive) pay. This distinction is an attractive feature of the data and makes it possible to use the base wage as the dependent variable in our analysis, hence the part-time wage gap must be understood as a lower base wage earned by part-time workers compared to otherwise equal full-time colleagues. The opportunity to use the base wage is particularly useful for the following three reasons: first, base wages and promotions are linked to the same wage scales. Second, the focus on the base wage avoids the effects of the interaction between incentive pay and promotions that may blur the results. Should promotion and incentive pay be negatively (positively) correlated, the inclusion of the variable wage part would weaken (reinforce) the part-time wage gap because workers in part-time jobs would experience less promotions but also higher (lower) incentive pay than their full-time colleagues. Eventually, the negative effect of fewer promotions on the wage could be offset by a higher variable wage component.

Third, and most important, the base wage is the wage component that is least prone to be correlated with working hours across firms. In fact, the base wage is the wage component that is most responsive to union wage bargaining. This leaves firms little leverage to use this specific wage component to shape a wage – working hour locus to match workers' wage-working hours preference (Biddle and Zarkin 1989).

Because of the particular Dutch situation, where many part-time jobs involve fewer than 20 hours of work per week, in the empirical analysis we will distinguish between three employment states: small part-time (fewer than 20 hours per week), part-time (20 hours or more but fewer than 36 hours per week), and full-time (36 hours or more per week). The adopted definition of part-time job appears to be rather accurate, according to the Dutch Central Bureau of Statistics (survey of employment and wage) 6.6% of all jobs between 30 and 35 working hours per week are full-time jobs, while 2.7% of all jobs involving more than 35 working hours per week are, in fact, part-time jobs.

Since the distribution of working hours has a large peak at 32 hours (for both men and women) we will implement a sensitivity analysis with an alternative definition of part-time that sets the cut off at 32 hours (20 hours or more but fewer than 32 hours per week).

The data used in the analysis amount to 62,581 workers who did not change employer (43,163 males and 19,418 females) and 1,697 young newly hired workers (school leavers, 1,007 males and 690 females). Part-time workers (either in regular or in small part-time jobs) amount to 24% (60%) of all workers (women). The contrast between men and women is less evident among young entrants the labor market, the share of part-time workers

amount to 38% among school leavers and it increases to 53% among women who have just left school.

The number of hours worked has a large impact on workers' hourly wage: the small part-time (part-time) wage gap amounts to 39% (17%) for women and to 33% (30%) for men.

The median age of the Dutch female workers who reduced their working time is 32, while it rises to 37 among women who increased their working time. The data do not contain the information necessary to link the decrease in hours worked to fertility decisions. The median age however is consistent with the pattern of fertility among Dutch women. The changes in the hours of work are not likely to be the result of measurement error because working hours are derived from administrative records.

However, if the decision to work part-time reduces the probability of promotion and promotions are associated with wage growth, part-time employment would still be associated with low wage growth, which would warrant the emergence of a part-time wage gap in due time. Indeed, the average wage growth among promotees is ten percentage points higher than the average wage growth among their colleagues who are not promoted.

The list and the definition of the variables used, along with descriptive statistics (for the sample of workers who did not change employer), can be found in Appendix 1.

4 EMPIRICAL ANALYSIS

4.1 *Part-time Wage Gap*

We investigate the effect of part-time on the wage, for which we correct for observed characteristics of firms and workers and unobserved heterogeneity of firms. The wage equation is

$$w_{i,f,t} = \beta'_1 PT_{i,f,t} + \beta'_2 X_{i,f,t} + \beta'_3 Z_{f,t} + \beta'_4 \overline{PT}_{f,t} + \beta'_5 \overline{X}_{f,t} + \beta'_6 d_t + \alpha_f + \varepsilon_{i,f,t} \quad t = 1998, 2000 \quad (1)$$

where w is the (logarithm) of the hourly wage; subscripts i , f and t refer to the worker, firm and year respectively; PT is a vector of part-time dummies; X is a vector of observed worker and job characteristics; Z is a vector of firm characteristics; and d is a time dummy variable (equal to one when $t=2000$). $\beta_k, k=1, 2, \dots, 6$, are vectors of parameters. The unobserved firm effect is captured by the sum of observed characteristics that vary across workers within firms (\overline{PT} and \overline{X}) and a random error term, α_f , which is assumed to be independent from PT , X and Z (Mundlak 1978). It can be shown that, in this framework, the parameter estimates of (1) are equal to those obtained with firm dummies. The advantage of specification (1) is that it becomes pos-

sible both to estimate the effects of the worker-invariant variables Z and to test for random effects versus fixed effects. The random error term ε is assumed to be independently and identically distributed (i.i.d.) across firms, but ε may be correlated within firms (i.e. we calculate the so-called clustered standard errors of the parameter estimates).

Next, we consider the regressors in greater detail. The vector PT consists of two dummy variables, one for a part-time job with fewer than 20 hours per week and a dummy variable for part-time job between 20 and 36 hours a week. X includes the following variables. A dummy for foreign-born, age and age squared, tenure and tenure squared, a dummy variable that signals when workers received payments for overtime work, 5 education level dummies, 6 occupational dummies, 6 job level dummies, and a year dummy. The matrix Z consists of 7 firm size dummies, 10 industry dummies, 3 union status dummies, and the average (contractual) length of the working week at the establishment.

We estimate Equation (1) for male and female employees separately. The results are shown in Table 1. It illustrates the sensitivity of the part-time wage gap to two different wage definitions. Columns 1 and 2 give the estimates for the hourly base wage. Columns 3 and 4 are based on the full (hourly) wage that contains all individual pay components, i.e., compensating differentials, performance bonuses, profit sharing and the piece rate. In all estimated models the estimated coefficients on PT and \bar{X} are jointly significant, so that we can reject a random effects specification (in favor of the fixed effects specification). The estimates for the base wage imply that men (women) in small part-time jobs have a wage gap of about 9.7% (2.2%) in comparison with their full-time colleagues. Men (women) in part-time employment have a wage gap of 3.0% (1.3%) with respect to their full-time colleagues.⁶

The part-time gap does not seem to hinge on the wage component used. The part-time wage gaps do not change systematically when the wage definition is broadened to include all individual pay components. The small part-time wage gap of women is reduced and so is the part-time wage gap of men that turns not significant. This latter phenomenon can be ascribed to the behavior of the individual pay components among male workers working 32–35 hours per week.

Table 2 shows the sensitivity of the part-time gap to different definitions of part-time work (20–35 hours or 20–32 hours). It shows that when the definition of part-time work is narrowed to include individuals working fewer

6 Similarly, a part-time pay penalty ranging from 2.7% to 3.6% has been found in the UK using the Labor Force Survey and both reported and hours based definition (fewer or equal to 30 weekly hours) of part-time status (Manning and Petrongolo 2008). However, the part-time wage gap is larger in the US, using the CPS data, the small part-time (part-time) gap is 11% (7%) for women and 21% (19%) for men (Hirsch 2005).

TABLE 1 – RANDOM EFFECT ESTIMATES OF EQUATION (1)^a

	Log (hourly base wage)		Log (hourly full wage) ^b	
	Men	Women	Men	Women
Dummy small part-time (weekly hours <20) ^c	-0.0971* [0.0112]	-0.0220* [0.0065]	-0.0936* [0.0129]	-0.0117* [0.0057]
Dummy part-time (20 ≤ weekly hours < 36) ^c	-0.0303* [0.0064]	-0.0135* [0.0035]	-0.0057 [0.0094]	-0.0133* [0.0037]
Age	0.0445* [0.0012]	0.0482* [0.0016]	0.0465* [0.0013]	0.0460* [0.0017]
Age squared/100	-0.0455* [0.0014]	-0.0536* [0.0019]	-0.0481* [0.0015]	-0.0523* [0.0020]
Tenure	0.0036* [0.0004]	0.0105* [0.0007]	0.0045* [0.0005]	0.0109* [0.0007]
Tenure squared/1000	-0.0783* [0.0109]	-0.2402* [0.0231]	-0.1046* [0.0127]	-0.2507* [0.0239]
Dummy foreign born	-0.0193* [0.0045]	-0.0307* [0.0068]	-0.0099 [0.0057]	-0.0238* [0.0075]
Dummy paid overtime	-0.0229* [0.0027]	-0.0035* [0.0041]	-0.0146* [0.0032]	0.0111* [0.0048]
Year dummy (2000 = 1)	0.0406* [0.0048]	0.0506* [0.0053]	0.0459* [0.0075]	0.0520* [0.0062]
Education (5 dummies)	(21.38)* [18.67]	(14.62)* [9.59]	(18.14)* [19.68]	(13.51)* [6.96]
Occupation (7 dummies)	(73.07)* [8.01]	(46.03)* [7.63]	(65.50)* [8.59]	(44.05)* [6.74]
Occupational level (7 dummies)				
Economic sector (10 dummies)				
Firm size (7 dummies)	(4.37)* [6.72]	(6.41)* [5.15]	(9.20)* [7.87]	(9.33)* [5.21]
Union status and average contractual length of the working week (4 variables)				

TABLE 1 – continued

	Log (hourly base wage)		Log (hourly full wage) ^b	
	Men	Women	Men	Women
\overline{PT}, \bar{X} (33 variables)	(61.37)*	(28.16)*	(31.26)*	(32.22)*
σ_α	0.0384	0.0603	0.0687	0.0703
σ_e	0.1541	0.1481	0.1657	0.1590
R-squared	0.8267	0.7740	0.7889	0.7526
Number of explanatory variables	83	83	83	83
Number of employees	43,162	19,418	43,162	19,418
Number of firms	2,233	2,076	2,233	2,076

^a Robust standard errors adjusted for clustering at the firm level in brackets, F-tests in parenthesis.

^b Includes individual pay components.

^c Reference group: dummy weekly hours ≥ 36 .

* Statistically different from zero at 5%-level.

TABLE 2 – ROBUSTNESS CHECK OF EQUATION (1): ALTERNATIVE DEFINITION OF PART-TIME WORK^a

	Log (hourly base wage)		Log (hourly full wage) ^b	
	Men	Women	Men	Women
Dummy small part-time (weekly hours <20) ^c	-0.0971* [0.0119]	-0.0198* [0.0050]	-0.0983* [0.0129]	-0.0093 [0.0055]
Dummy part-time (20 ≤ weekly hours <32) ^c	-0.0489* [0.0073]	-0.0126* [0.0035]	-0.0527* [0.0088]	-0.0120* [0.0037]

^a Robust standard errors adjusted for clustering at the firm level in brackets. The table only presents the estimated coefficients on the part-time dummies, because the remaining coefficients did not show any appreciable change from those showed in Table 1.

^b Includes individual pay components.

^c Reference group: dummy weekly hours ≥32.

* Statistically different from zero at 5%-level.

than 32 hours per week (but more than 20) the part-time wage gap among men, expressed in terms of the base wage, widens and it increases further when individual pay components are added. That is, workers in part-time jobs according to the narrow definition, relative to their full-time colleagues, experience a part-time gap in the base wage and also in the individual pay components.

To bypass the effects of past working experience (and past part-time employment), we focus on young workers (their average age is about 20 years and so is their median age) entering the labor market just after having left school. We re-estimated equation (1) for this sub-sample of workers.⁷ Table 3 presents the estimates. The school leavers were just hired by the firm and therefore their tenure is equal to zero. Since fertility decisions are relatively far away for this group of workers, firms should not treat men and women differently. However, the number of hours worked are already different between men and women. Women work on average 25 hours per week while men work on average 33 hours per week. This suggests that working time decisions are sometimes taken upon entering the labor market.⁸

Table 4 shows the estimates for school leavers based on the alternative part-time definition. They suggest that there is no part-time wage gap among young workers, irrespective of the wage and of the part-time definition adopted.⁹ Therefore, the part-time wage gap must arise over time as workers progress in their career.

4.2 *Part-time Employment and Promotion Probability*

We now turn to the effect of part-time status on the probability of promotion. The random effects specification we estimate is the following:

$$P_{i,f,t} = \gamma_1' PT_{i,f,t-1} + \gamma_2' X_{i,f,t-1} + \gamma_3' Z_{f,t-1} + \gamma_4' \overline{PT}_{f,t-1} + \gamma_5' \overline{X}_{f,t-1} + \gamma_6' d_t + \lambda_f + v_{i,f,t} \quad t = 1998, 2000 \quad (2)$$

7 The development of the part-time wage gap over time could not have been captured by an interaction term between job tenure and hours of work because workers may have changed between part-time and full-time status in the past.

8 The average mothers' age at first birth is about 27 years. Although, we cannot rule out the possibility that some of the young women in our sub-sample already had children. The very low average age suggests that this is not likely. We cannot elaborate on the fertility issue, however, because of the lack of information about the employees' household composition.

9 This could be the result of school leavers being a special group of workers whereby minimum wage regulations might be particularly stringent thus constraining firms' actions. In particular, it may be the consequence of particularly low wages paid to full-time school leavers. In this case the difference between the average wage of full-time school leavers and full-time workers should be larger than the corresponding difference between part-time school leavers and part-time workers. In fact, the opposite is true.

TABLE 3 – RANDOM EFFECT ESTIMATES OF EQUATION(1) FOR THE SCHOOL LEAVERS^a

	Log (hourly base wage)		Log (hourly full wage) ^b	
	Men	Women	Men	Women
Dummy small part-time (weekly hours <20) ^c	0.0422 [0.0380]	0.0348 [0.0374]	0.0450 [0.0367]	0.0226 [0.0311]
Dummy part-time (20 ≤ weekly hours <36) ^c	-0.0001 [0.0239]	0.0355 [0.0338]	-0.0087 [0.0263]	0.0185 [0.0299]
Age	0.3157* [0.0456]	0.2410* [0.0316]	0.3162* [0.0456]	0.2406* [0.0314]
Age squared/100	-0.5204* [0.1043]	-0.3848* [0.0676]	-0.5413* [0.1044]	-0.3839* [0.0672]
Dummy foreign born	-0.0088 [0.0296]	0.0023 [0.0417]	-0.0089 [0.0296]	0.0027 [0.0416]
Dummy paid overtime	0.0539* [0.0233]	0.0285 [0.0391]	0.0540* [0.0233]	0.0284 [0.0389]
Year dummy (2000 = 1)	0.0721* [0.0172]	0.0631* [0.0227]	0.0717* [0.0171]	0.0625* [0.0226]
Education (5 dummies)	(3.10) (3.03)	(2.71) (2.07)	(3.08) (3.03)	(2.65) (2.11)
Occupation (6 dummies)	(7.91)* (5.52)*	(7.15)* (5.28)*	(7.93)* (5.50)*	(7.13)* (5.28)*
Occupational level (6 dummies)	(4.06)* (4.79)*	(3.84)* (1.62)	(4.08)* (4.78)*	(3.76)* (1.61)
Economic sector (10 dummies)				
Firm size (7 dummies)				
Union status and average contractual length of the working week (4 variables)	(14.34)* 0.1435	(12.74)* 0.1013	(14.38)* 0.1437	(12.69)* 0.0986
σ_α	0.1551	0.1775	0.1551	0.1794
σ_ϵ	0.8270	0.8484	0.8270	0.8483
R-squared				

TABLE 3 – continued

	Log (hourly base wage)		Log (hourly full wage) ^b	
	Men	Women	Men	Women
Number of explanatory variables	81	81	81	81
Number of employees	1,007	690	1,007	690
Number of firms	584	421	584	421

^a Robust standard errors adjusted for clustering at the firm level in brackets, F-tests in parenthesis.

^b Includes individual pay components.

^c Reference group: dummy weekly hours ≥ 36 .

* Statistically different from zero at 5%-level.

TABLE 4 – ROBUSTNESS CHECK OF EQUATION(1) FOR THE SCHOOL LEAVERS: ALTERNATIVE DEFINITION OF PART-TIME WORK^a

	Log (hourly base wage)		Log (hourly full wage) ^b	
	Men	Women	Men	Women
Dummy small part-time (weekly hours <20) ^c	0.0309 [0.0382]	0.0422 [0.0392]	0.0364 [0.0366]	0.0306 [0.0329]
Dummy part-time (20 ≤ weekly hours < 32) ^c	-0.0029 [0.0244]	0.0279 [0.0357]	0.0127 [0.0269]	0.0093 [0.0315]

^a Robust standard errors adjusted for clustering at the firm level in brackets. The table only presents the estimated coefficients on the part-time dummies, because the coefficients on the remaining variables did not show any appreciable change from those showed in Table 3.

^b Includes individual pay components.

^c Reference group: dummy weekly hours ≥ 32.

* Significantly different from zero at 5%-level.

TABLE 5 – RANDOM EFFECTS PROBIT ESTIMATES OF EQUATION (2)^a

	Internal mobility		Promotion	
	Men	Women	Men	Women
Dummy small part-time (weekly hours <20) ^c	-0.0176* [0.0025]	-0.0124* [0.0020]	-0.0128* [0.0022]	-0.0097* [0.0017]
Dummy part-time	-0.0077* [0.0028]	-0.0057* [0.0018]	-0.0059* [0.0023]	-0.0035* [0.0015]
(20 ≤ weekly hours < 36) ^c				
Age	-0.0039* [0.0006]	-0.0028* [0.0006]	-0.0034* [0.0005]	-0.0024* [0.0005]
Age squared/100	0.0026* [0.0007]	0.0027* [0.0009]	0.0023* [0.0006]	0.0024* [0.0007]
Tenure	-0.0009* [0.0003]	-0.0017* [0.0004]	-0.0006* [0.0002]	-0.0013* [0.0003]
Tenure squared/1000	0.0140 [0.0087]	0.0228 [0.0147]	0.0057 [0.0076]	0.0120 [0.0130]
Dummy foreign born	0.0041 [0.0038]	0.0031 [0.0040]	0.0032 [0.0032]	0.0038 [0.0035]
Dummy paid overtime	0.0029 [0.0020]	0.0036 [0.0030]	0.0038* [0.0017]	0.0027 [0.0025]
Year dummy (2000 = 1)	0.0012 [0.0018]	0.0045* [0.0020]	0.0003 [0.0015]	0.0023 [0.0016]
Education (5 dummies)	(4.49)	(8.00)	(3.86)	(10.33)
Occupation (6 dummies)	(38.43)*	(22.93)*	(43.72)*	(26.83)*
Occupational level (6 dummies)	(189.58)*	(97.41)*	(219.20)*	(109.71)*
Economic sector (10 dummies)	(23.66)*	(18.92)*	(21.92)*	(21.84)*
Firm size (7 dummies)	(58.75)*	(33.64)*	(40.81)*	(23.83)*
Union status and average contractual length of the working week (4 variables)	(12.23)*	(4.21)	(30.76)*	(3.05)
PT, X (33 variables)	(65.34)*	(59.03)*	(61.66)*	(62.57)*
σ_λ	0.4897	0.5133	0.4830	0.5209

TABLE 5 – continued

	Internal mobility		Promotion	
	Men	Women	Men	Women
Log likelihood restricted model	-8,720.48	-3,615.95	-7,800.69	-3,230.18
Log likelihood full model	-7,588.23	-3,060.78	-6,698.97	-2,708.61
LR test (Chi squared)	2,264.51*	1,110.35*	2,203.43*	1,043.15*
Number of explanatory variables	84	84	84	84
Number of employees	43,162	19,418	43,162	19,418
Number of firms	2,233	2,076	2,233	2,076

^a Marginal effects at the sample means of explanatory variables. Robust standard errors adjusted for clustering at the firm level in brackets, Wald chi-square test in parenthesis.

^b Reference group: dummy weekly hours ≥ 36 .

* Significantly different from zero at 5%-level.

$P_{i,f,t}$ is a dummy variable equal to one if the employee (i in firm f) experiences a promotion between $t - 1$ and t and zero elsewhere. γ_k , $k = 1, 2, \dots, 6$, are vectors of parameters to be estimated. Like in equation (1), the unobserved firm effect is the sum of observed characteristics that vary across workers within firms (\overline{PT} and \overline{X}) and a random error term, λ_f , which is assumed to be independent from PT , X and Z . The random error term ν is i.i.d.

The estimation results are shown in Table 5 that illustrates the sensitivity of the part-time wage gap to different promotion definitions: internal mobility (a broader concept of career including horizontal as well as vertical mobility) and promotions proper. Table 6 shows the sensitivity of the part-time gap in career opportunities to different definitions of part-time work (20–35 hours or 20–32 hours). The negative relationship between the part-time employment dummies and the promotion probability stands out clearly. Men and women in part-time employment experience reduced career opportunities, that is, a smaller incidence of internal mobility and promotions, irrespective of the definition of part-time work adopted. The effect is stronger for workers in small part-time jobs (both male and female), and it is particularly strong for men. However, we do not detect gender differences in the promotion probability.

The differential incidence of promotion between part-time and full-time workers is enough to sustain an equilibrium part-time wage gap because promotions are accompanied – on average – by wage growth acceleration of about 10% for men and women alike.¹⁰

All in all, our results suggest that the number of hours worked does not affect the wage growth directly, but it does so indirectly through the low incidence of promotions and diminished career opportunities among part-time workers.

The larger part-time wage gap experienced by male workers relative to female workers still remains to be explained. We offer two possible reasons for this phenomenon. The first one posits that female workers switch more often between part-time and full-time jobs than male workers. Consequently, most female workers would spend at least some of their time in the labor market in part-time employment. In contrast, male workers tend to be stuck in one form of employment with little opportunity of change, full-time work-

10 The wage growth associated with internal mobility drops to 8 percentage points when individual and firm specific characteristics are controlled for. Internal mobility could be the result of internal restructuring rather than of career progression. Assuming that restructuring is accompanied by downsizing, we have estimated the impact of internal mobility on wage growth on the sub-sample of firms that experience negative employment growth over the period. Internal mobility is still associated with a wage acceleration of about 8% for men and women (results available from the authors upon request). Moreover, once the effect of promotions is accounted for, the transition between employment states does not seem to be related to wage growth in any clear way (Russo and Hassink 2005).

TABLE 6 – ROBUSTNESS CHECK OF EQUATION (2): ALTERNATIVE DEFINITION OF PART-TIME WORK^a

	Internal mobility		Promotion	
	Men	Women	Men	Women
Dummy small part-time (weekly hours <20) ^b	-0.0174* [0.0026]	-0.0123* [0.0020]	-0.0127* [0.0022]	-0.0097* [0.0016]
Dummy part-time (20 ≤ weekly hours < 32) ^b	-0.0081* [0.0039]	-0.0074* [0.0018]	-0.0080* [0.0030]	-0.0047* [0.0015]

^a Robust standard errors in brackets. The table only presents the estimated coefficients on the part-time dummies, because the coefficients on the remaining variables did not show any appreciable change from those showed in Table 5.

^b Reference group: dummy weekly hours ≥ 32.

* Significantly different from zero at 5%-level.

ers tend to work full-time for their entire working life and workers holding small part-time jobs tend to hold them throughout. In this scenario the female part-time wage gap would be smaller than the male part-time wage gap, even if male and female workers would have the same promotion probability. In fact, during the 1990s between 24% to 29% (6%) of women (men) held a part-time position in the three years prior to the interview (Roman et al. 2004), over the same period 22% of female workers with a full-time job switched to a part-time job within the following 4 years (Muffels et al. 1998). The high rate of mobility of women between part-time and full-time jobs could be a Dutch phenomenon, however.

The second explanation we offer relies on the differential salience of part-time employment among male and female workers induced by the popularity of part-time employment among female workers. If most women choose to work part-time (and Dutch women are likely to do so), part-time employment status cannot be used as a screening device because it ceases to be informative about work attitudes. On the contrary, because part-time employment is still a rather uncommon phenomenon among men, part-time status becomes salient. In this case, men in part-time jobs may be adversely affected by firms' screening behavior (but women are not) and the part-time wage gap among men would be larger than the one found among women.

4.3 *Synthesis and Discussion*

All in all, our result seem to suggest that the part-time wage gap takes time to develop: we find that transitions between part-time and full-time status do not seem to affect wage growth in any clear way, that internal mobility and promotions are an important source of wage growth (Russo and Hassink 2005) and that the part-time wage gap is not observed among school leavers (irrespective of the wage and part-time definition). Furthermore, we find that workers (men and women alike) forego promotion possibilities during part-time employment spells and consequently miss important wage growth accelerations.¹¹

On the one hand, the part-time pay gap is not likely to be due to firms having an interest in the number of hours and trying to equalize labor cost between full-time and part-time jobs because we have chosen the wage components on which employers have least control. Therefore, employers' ability to adjust wages to the number of hours is minimized (Biddle and Zarkin 1989). In fact, the wage component used in the analysis—the base wage—

11 US workers (men and women) suffer a substantial wage gap for time out of the labor market in the early stages of their careers (Light and Ureta 1995). The same result is found among German pupils spending different amounts of time in the apprenticeship system (Kunze 2002).

being the result of collective bargaining, tracks the job title and occupation very closely and it is the wage component that is least amenable to manipulation by (individual) employers.

On the other hand, the negative effect of part-time on wages and promotions may be influenced by unobserved workers characteristics affecting wages, promotions, and the probability to work part-time. To pursue this issue further, we have modeled the probability to work part-time and the probability to experience internal mobility simultaneously, by means of a bivariate Probit model. The dependent variable in the part-time equation takes on the value one if workers work part-time (either part-time or small part-time) and zero otherwise. Both equations of the bivariate Probit model have the same explanatory variables as equation(2). This set-up makes it possible to estimate the direction and the strength of correlation between unobserved components that affect the likelihood to work part-time and the incidence of promotions. The bivariate Probit model is estimated for men and women separately. We found negative (small but significant) correlations among the error terms in both samples (-0.119 for men and -0.170 for women). In other words, unobservable characteristics that tend to increase the probability to work part-time tend also to decrease career opportunities.¹²

Unobserved ability/productivity is not a likely candidate, however, in fact, in the psychological literature part-time workers are found to be similar to their full-time colleagues in many productivity related attitudes (Thorsteinson 2003). Moreover, the choice to work part-time is also influenced by social norms, which influence the choices of all workers irrespective of their ability/productivity (Burke and Reitzes 1991, Akerlof and Kranton 2000, Booth and van Ours 2006). Rather, it is plausible to conjecture that part-time workers are time-constrained workers, and that part-time schedule is an instru-

12 Similarly, to the extent that part-time status and the error term in the wage regression are negatively correlated owing to lower levels of unobservable characteristics among part-time workers, the estimated part-time pay gap would over-estimate the true part-time pay gap. To pursue the endogeneity issue in the wage regression we have instrumented current working hours with past working hours. There is a great deal of stability in small part-time employment, but much less so in part-time employment: 89% (91%) of the men (women) holding small part-time jobs in $(t-1)$ held the same position in t ; 33% (66%) of the men (women) holding a part-time job in $(t-1)$ held the same position one year later. The estimated part-time wage gaps obtained when working hours are instrumented by past working hours are very close to those in Tables 1 and 2. Past working hours are relevant instruments, the joint significance test (F -test) in the first stage regressions is very high: it is as high as 3,018.49 (9,275.86) in the case of small part-time for men (women), 3,002.06 (8,874.29) in the case of part-time for men (women). We do not emphasize these results, however, because past hours are not exogenous instruments when unobserved factors affecting hours and wages persist over time (Hirsch 2005). The full set of results from the bivariate Probit and the IV regressions are not shown for want of space but they can be obtained from the authors upon request.

ment to conciliate work and non-work activities. The time bind part-time workers experience, in turn, could transform into an insurmountable obstacle to career when the time input is an important element in the firms' incentive schemes governing promotions and career advancements.

Finally, we want to stress that irrespective of the unobserved factors causing the part-time wage gap, our analysis suggests that the ensuing wage effects are plausibly played out through diminished career opportunities for part-time workers.

5 CONCLUSION

In the Netherlands, like in many developed countries, the part-time wage gap (controlling for work and job characteristics) is small and it is close to zero for young workers but it grows with age. Moreover, we find that the part-time pay gap is larger for men than for women.

The main contribution – the original element in our analysis – is to show that in the Netherlands the observed pattern is driven by differences in promotion rates between part-time and full-time workers.

We have found that the part-time wage gap does not arise at onset when workers enter the labor market or when workers change the number of hours worked but it rather develops over time as labor market experience accumulates. In addition, part-time workers tend to have a lower promotion probability – characteristics that increase the probability of part-time employment tend to reduce the incidence of promotions – and promotions are accompanied by a wage growth acceleration of about eight percentage points.

The negative association between part-time employment and the incidence of promotions (largely capturing differences in personal attitudes, albeit we have little direct evidence on this) is a rather important relationship for countries like the Netherlands where part-time work is an important policy instrument that has effectively contributed to the reduction of unemployment and to the increase in female labor force participation. In fact, our analysis suggests that the part-time jobs women so readily accept will offer them limited career possibilities, to the extent that these make part-time work less appealing there could be adverse effects on aggregate employment (and unemployment) dynamics. The flip side of this coin is a call for public support for the introduction of family friendly human resource practices, in particular those aimed at reducing the career penalties associated with part-time work. In fact, individual firms will not count among the benefit deriving from the introduction of family friendly human resource practices their positive external effect on aggregate employment.

APPENDIX

TABLE A1 – DESCRIPTIVE STATISTICS

Variable	Definition		Men		Women	
			Mean	Std. err.	Mean	Std. err.
Hours	Hours worked in the week (log)		3.60	0.26	3.21	0.56
Small part-time	Hours worked in the week < 20	Dummy variable	0.03	0.16	0.25	0.43
Part-time	20 ≤ hours worked in the week < 36	Dummy variable	0.02	0.14	0.25	0.43
Full-time	Hours worked in the week ≥ 36	Dummy variable	0.95	0.21	0.51	0.50
Foreign	Foreign worker (non Dutch)	Dummy variable	0.04	0.21	0.05	0.21
Age	Worker's age		40.09	10.35	37.30	10.31
Tenure	Years with current employer		10.96	9.43	7.61	6.84
Primary	Basis education (LO)	Dummy variable	0.05	0.22	0.07	0.25
Low general	First level general education (MAVO)	Dummy variable	0.07	0.26	0.19	0.39
Low vocational	First level vocational education (MBO)	Dummy variable	0.39	0.49	0.22	0.41
Secondary general	Secondary school diploma (HAVO, VWO)	Dummy variable	0.06	0.24	0.14	0.35
Secondary vocational	Advanced vocational education (HABO)	Dummy variable	0.23	0.42	0.25	0.43
University	University (WO)	Dummy variable	0.15	0.36	0.10	0.31
Technical	Technical occupation	Dummy variable	0.44	0.50	0.11	0.31
Administrative	Administrative occupation	Dummy variable	0.10	0.30	0.31	0.46
Information technology	IT occupation	Dummy variable	0.03	0.17	0.01	0.10
Commercial	Commercial occupation	Dummy variable	0.08	0.27	0.12	0.32
Services	Service occupation	Dummy variable	0.21	0.41	0.41	0.49

TABLE A1 – continued

Variable	Definition		Men		Women	
			Mean	Std. err.	Mean	Std. err.
Management	Management	Dummy variable	0.12	0.33	0.04	0.19
Creative	Creative occupation	Dummy variable	0.02	0.15	0.02	0.13
Very simple tasks	Level I	Dummy variable	0.01	0.11	0.05	0.22
Simple and repetitive tasks	Level II	Dummy variable	0.07	0.25	0.12	0.33
Routines with simple decision making	Level III	Dummy variable	0.17	0.38	0.25	0.43
Non routine, with simple decision making	Level III high	Dummy variable	0.25	0.43	0.20	0.40
Difficult tasks, decision making	Level IV	Dummy variable	0.28	0.45	0.27	0.44
Difficult tasks, initiative	Level V	Dummy variable	0.17	0.38	0.09	0.28
Management	Level VI	Dummy variable	0.05	0.21	0.02	0.14
Upper management	Level VII	Dummy variable	0.00	0.07	0.00	0.02
1–4	Fewer than 5 employees at the firm	Dummy variable	0.02	0.13	0.02	0.15
5–9	5–9 Employees at the firm	Dummy variable	0.03	0.17	0.05	0.22
10–19	10–19 Employees at the firm	Dummy variable	0.08	0.28	0.08	0.28
20–49	20–49 Employees at the firm	Dummy variable	0.14	0.34	0.11	0.32
50–99	50–99 Employees at the firm	Dummy variable	0.15	0.36	0.14	0.35
100–199	100–199 Employees at the firm	Dummy variable	0.20	0.40	0.17	0.37
200–499	200–499 Employees at the firm	Dummy variable	0.18	0.38	0.19	0.39
=> 500	500 or more employees at the firm	Dummy variable	0.20	0.40	0.23	0.42
Agriculture	ISIC (Rev. 3) 01–05	Dummy variable	0.01	0.12	0.01	0.09
Mining	ISIC (Rev. 3) 10–14	Dummy variable	0.01	0.10	0.00	0.07
Manufacturing	ISIC (Rev. 3) 15–37	Dummy variable	0.34	0.47	0.18	0.38

TABLE A1 – continued

Variable	Definition		Men		Women	
			Mean	Std. err.	Mean	Std. err.
Public utilities	ISIC (Rev. 3) 40–41	Dummy variable	0.03	0.16	0.01	0.10
Construction	ISIC (Rev. 3) 45	Dummy variable	0.09	0.29	0.01	0.10
Wholesale & retail trade	ISIC (Rev. 3) 50–52	Dummy variable	0.14	0.35	0.15	0.36
Restaurants & hotels	ISIC (Rev. 3) 55	Dummy variable	0.01	0.10	0.02	0.15
Transport & communication	ISIC (Rev. 3) 60–64	Dummy variable	0.09	0.28	0.05	0.22
Financial services	ISIC (Rev. 3) 65–67	Dummy variable	0.03	0.17	0.05	0.22
Business services	ISIC (Rev. 3) 70–74	Dummy variable	0.11	0.31	0.13	0.33
Public administration	ISIC (Rev. 3) 75	Dummy variable	0.07	0.25	0.07	0.25
Education	ISIC (Rev. 3) 80	Dummy variable	0.01	0.09	0.01	0.10
Health services	ISIC (Rev. 3) 85	Dummy variable	0.03	0.17	0.24	0.42
Culture, sport, & other personal services	ISIC (Rev. 3) 90–99	Dummy variable	0.03	0.18	0.07	0.26
Industry Collective Agreement	Industry level collective agreement (bargaining)	Dummy variable	0.72	0.45	0.73	0.45
Firm Collective Agreement	Firm level collective agreement (bargaining)	Dummy variable	0.07	0.25	0.04	0.20
AVV	AVV	Dummy variable	0.03	0.16	0.03	0.17
Non union	Not covered by any union agreement	Dummy variable	0.00	0.04	0.00	0.06
Length of the working week	Usual number of hours per week at the firm, in log		38.61	1.67	37.80	1.73
Hourly base wage	Gross base wage (without overtime or bonuses) divided By the number of hours worked (in log)		3.30	0.38	3.12	0.33
			3.37	0.39	3.16	0.34

TABLE A1 – continued

Variable	Definition		Men		Women	
			Mean	Std. err.	Mean	Std. err.
Hourly full wage	Wage including individual pay components per hour worked (in log)					
Internal mobility	Change of department or job assignment	Dummy variable	0.05	0.22	0.05	0.21
Promotion	Worker has been promoted	Dummy variable	0.04	0.21	0.04	0.19
Overtime	Overtime compensation received	Dummy variable	0.24	0.43	0.09	0.29
Number of observations			43,163		19,418	

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